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EXAMINER	
APPIAH, CHARLES NANA	
ART UNIT	**PAPER NUMBER**
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/824,891	PARK ET AL.	
	Examiner	Art Unit	
	Charles N. Appiah	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *250-351* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *250-351* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date .
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 255 is objected to because of the following informalities: Claim 255 is recited as being dependent on claim 255, which appears to be a typographical error. Appropriate correction is required.

Double Patenting

2. Claims 250-351 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-102 of U.S. Patent No. 6,741,868. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of the claims of the instant application are broad and are encompassed by the claims of the patent. For example the limitation of "providing the terminal with a message including a core network operating type information representing an operating type of a core network" of claims 250, 265, 279, 290, 301, 312, 323, and 338 are met by "at the BS, providing the terminal with the core network operating type information and information related to the core network through a predetermined channel in a form of a message" of claim 1 of the patent.

3. Claims 250-351 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 250-321 of copending Application No. 10/825,281 ('281 application). Although the conflicting claims are not identical, they are not patentably distinct from each other because the

claims of the '281 application are broad enough to be encompassed by the claims of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claims 250-351 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 250-322 of copending Application No. 10/824,908. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant are broad enough to be encompassed by the limitations the '908 application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 250-351 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 250-291 of copending Application No. 10/824,909. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of the claims of the instant application are encompassed by the limitations of the '909 application and as such it would have been obvious to one of ordinary skill in the art to implement the invention of the claims of the instant application using the claims of the application in order to interface between a terminal and a radio network for providing hybrid communications.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 250-351 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 258-267, 275, 283-291 of copending Application No. 10/825,280. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of the claims of the instant application are encompassed by the limitations of the claims of the '280 application. For example the limitation of "providing the terminal with a message including a core network operating type information representing an operating type of a core network" of claims 250, 265, 279, 290, 301, 312, 323, and 338 are met by "recognizing an operating type of the core network on the basis of a core network operating type information contained in a message, to thereby allow the terminal to operate according to the recognized operating type of the core network" of claims 258, 267, 275, 283, 284, 286 and 288 of the application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 250-351 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 260, 261, 272, 273, 288, 298, 309, 310, 320, and 322-327 of copending Application No. 10/825,281.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of the claims of the instant application are encompassed by the limitations of the claims of the '281 application. For example the limitation of "providing the terminal with a message including a core network operating type information representing an operating type of a core network" of claims 250, 265,

279, 290, 301, 312, 323, and 338 are met by "at the BS, providing the terminal with the core network operating type information and information related to the core network through a predetermined channel in a form of a message" of claims 260-261, 273, 288, 298, 309, 310, 320 of the application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claims 250-351 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 250-310 of copending Application No. 10/824,929. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the limitations of the claims of the instant application are broadly encompassed by the claims of the application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. Claims 250-351 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 250-291 of copending Application No. 10/824,927. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of the claims of the instant application are broadly found within the claims of the application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. Claims 250-351 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 250-313 of

copending Application No. 10/824,928. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of the claims of the instant application are broadly found within the claims of the application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 250, 251, 253, 255-259, 300, 301, 303, 305-307, 308 and 309 are rejected under 35 U.S.C. 102(e) as being anticipated by **Korpela (5,946,634).**

Regarding claims 250 and 323, Korpela discloses a method for interfacing between a terminal (10), and a radio network (20a-20c), wherein the terminal has a hybrid operating type being possible to be set as either a synchronous operating type or the asynchronous operating type (digital signal processor of mobile terminal capable of operating in several modes under control of the control device to selectively interconnect and set up either a voice or data (B-ISDN) communication session, see col. 3, line 66 to col. 4, line 3), the method comprising: providing the terminal with a

message including a core network operating type information representing an operating type of a core network (see Fig. 9, steps 1202-1206, col. 6, lines 29-41).

Regarding claims 251, 253, 324, 326 and 327, Korpela further discloses storing a core network operating type information (storage as code file, step 1222, Fig. 10), and reading the core network operating type information stored on a storage device during a time period of initialization of the radio network (registering on network and proceeding using new protocols, steps 1230, 1232 of Fig. 12) and wherein the storage device includes a memory for storing the operating type of the core network (feature of step 1304 of Fig. 11).

Regarding claims 255, 256, Korpela further discloses wherein the core network operating type information is periodically inserted into the predetermined location of the message to be transmitted to the terminal (see col. 6, lines 15-24).

Regarding claim 257, Korpela further discloses wherein the predetermined channel is a synchronous channel (see col. 6, lines 14-28).

Regarding claims 265 and 338, Korpela discloses an apparatus for interfacing between a terminal (10), and a radio network (20a-20c), wherein the radio network has an asynchronous operating type and the terminal has a hybrid operating type being possible to be set as either a synchronous operating type or the asynchronous operating type (digital signal processor of mobile terminal capable of operating in several modes under control of the control device to selectively interconnect and set up either a voice or data (B-ISDN) communication session, see col. 3, line 66 to col. 4, line 3), comprising: a storage device contained in the radio network for storing core network

operating information representing an operating type of a core network (see col. 4, lines 14-36), extraction block, contained in the radio network, for reading the core network operating type information during a period of initialization of the radio network (registering on network and proceeding using new protocols, steps 1230, 1232 of Fig. 12) and wherein the storage device includes a memory for storing the operating type of the core network (feature of step 122 of Fig. 10), and messaging block (see 102 of Fig. 8), contained in the radio network, for periodically providing the terminal with the core network operating type information contained in a message through a predetermined channel (see col. 6, lines 14-28).

Regarding claims 267 and 268, Korpela further discloses wherein the storage device includes a memory for storing the operating type of the core network (accessing protocol file in store 26, step 1304 of Fig. 11).

Regarding claim 269, Korpela further discloses wherein the predetermined channel is a synchronous channel (mobile terminal receives broadcast signals as transmitted on the broadcast control channel, col. 6, lines 14-41 and col. 2, line 66 to col. 3, line 5).

Regarding claims 270, Korpela's teaching as illustrated in Figs. 8 and 9 shows the message block inserting the core network operating type information into a synchronous channel message (see col. 6, lines 14-41, Fig. 8).

Regarding claim 277, Korpela further discloses wherein the radio network includes at least one BTS (20) for transmitting the message and BSC for controlling the BTS (see col. 1, lines 19-34, and col. 4, lines 13-15).

Regarding claims 255, 256, 305 and 306, Korpela further teaches inserting the core network operating type information into the message and transmitting the message through a predetermined channel (see 102 of Fig. 8) and wherein the predetermined channel is a synchronous channel (mobile terminal receives broadcast signals as transmitted on the broadcast control channel, col. 6, lines 14-41 and col. 2, line 66 to col. 3, line 5).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14. Claim 252, 254, 266, 268, 325, 327, 339 and 341 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Korpela (5,946,634) in view of Well Known Prior Art (Official Notice).**

Regarding claims 252, 254, 266, 268, 325, 327, 339 and 341, Korpela meets all limitations as applied to claims 250, 253, 265, 267, 338 and 340 above, but fails to specifically teach that the storage device includes a dip-switch for designating the operating type of the core network and the memory is a read only memory (ROM).

The use of storage devices including a dip-switch or ROM is very well known in the art and as such examiner takes Official Notice that it would have been obvious to one of ordinary skill in the art to provide a storage or memory device including a dip-

switch or ROM in the system of Korpela in order to control the executing of codes from the storage locations for effecting desired communications.

15. Claims 279-288, 290-292, 294, 297-302, 304, 312, 314, 329, 334 and 335 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Korpela (5,946,634)** in view of **Lupien et al. (6,389,008)**.

Regarding claims 279, 290, 301, and 312, Korpela meets all limitations as applied above to claims 250, 265, 323 and 338, but fails to specifically that the core network type information includes an ANSI-41 information representing a synchronous operating type core network.

Lupien discloses an integrated radio communication network, which integrates an ANSI-41 circuit switched network and a GPRS packet data network (see title, abstract), wherein the amount of integration is kept as low as possible by maintaining the integrity of each network function and node on both the GPRS side of the interface and the ANSI-41 side (see col. 4, lines 42-63, col. 16, lines 35-51), and includes an ANSI-41 core network (see col. 12, lines 3-21).

It would therefore have been obvious to one of ordinary skill in the art to implement Korpela's multiple protocol communication system wherein a core network operates according to ANSI-41 protocols in order to allow mobile subscribers to access both voice/circuit switched and packet switched services in a flexible manner as taught by Lupien.

Regarding claims 280, 282, 283, 294, 302, 304 and 314, Korpela further discloses storing a core network operating type information in a storage device (storage

as code file, step 1222, Fig. 10), and reading the core network operating type information stored on a storage device during a time period of initialization of the radio network (registering on network and proceeding using new protocols, steps 1230, 1232 of Fig. 12) and wherein the storage device includes a memory for storing the operating type of the core network (feature of step 1304 of Fig. 11).

Regarding claims 284 and 285, Korpela further teaches inserting the core network operating type information into the message and transmitting the message through a predetermined channel (see 102 of Fig. 8), and wherein the predetermined channel is a synchronous channel (mobile terminal receives broadcast signals as transmitted on the broadcast control channel, col. 6, lines 14-41 and col. 2, line 66 to col. 3, line 5).

Regarding claims 286 and 329 Korpela further discloses the core network operating type information is periodically inserted into the message (see col. 6, lines 15-24).

Regarding claims 287, 288, 334 and 335, Korpela's teaching as illustrated in Figs. 8 and 9 shows the message including a master information block and system information message (see col. 6, lines 14-41).

Regarding claim 291, Korpela further discloses a second storage device, contained in the terminal, for storing the recognized operating type of the core network (see Fig. 5).

Regarding claims 300 and 322 Korpela further discloses wherein the radio network includes at least one BTS (20) for transmitting a synchronous message and BSC for controlling the BTS (see col. 1, lines 19-34, and col. 4, lines 13-15).

Regarding claims 292, 297-299 Korpela further discloses wherein the detection block includes: receiver block for receiving the master information block having the core network operating type information (see Fig. 9, steps 1202-1206, col. 6, lines 29-41), and extraction block for extracting the core network operating type information from the received master information block (registering on network and proceeding using new protocols, steps 1230, 1232 of Fig. 12).

16. Claims 281, 283, 293, 295, 303, 313 and 315 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korpela and Lupien et al as applied to claims 280, 282, 291, 294, 311, 314, and further in view of Well Known Prior Art (Official Notice).

Regarding claims 281, 283, 293, 295, 303, 313 and 315, Korpela as modified by Lupien fail to specifically teach that the messaging block includes a dipswitch for designating the operating type of the core network and the memory is a read only memory (ROM).

The use of storage devices including a dip-switch or ROM is very well known in the art and as such examiner takes Official Notice that it would have been obvious to one of ordinary skill in the art to provide a storage or memory device including a dip-switch or ROM in the system of Korpela and Lupien in order to control the executing of codes from the storage locations for effecting desired communications.

17. Claims 263, 264, 336 and 337 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korpela as applied to claims 250 and 323 above, and further in view of **3GPP TS 25.331 V3.0.0 (1999-10)**, hereinafter referred to as (the Specification).

Regarding claims 263, 264, 336 and 337, Korpela discloses a method for interfacing between a terminal (10), and a radio network (20a-20c) and a core network (30a-30c), connected to the radio network, wherein the radio network has an asynchronous operating type and the terminal has a hybrid operating type being possible to be set as either a synchronous operating type or the asynchronous operating type (digital signal processor of mobile terminal capable of operating in several modes under control of the control device to selectively interconnect and set up either a voice or data (B-ISDN) communication session, see col. 3, line 66 to col. 4, line 3), the method comprising: providing the terminal with a message including a core network operating type information representing an operating type of a core network (see Fig. 9, steps 1202-1206, col. 6, lines 29-41). Korpela fails to explicitly disclose wherein the message is represented by a table as set forth in the claims.

The Specification teaches the use of broadcast of system information to broadcast system information elements that are of the same nature in a system information block (see page 24, paragraphs 8.1.1.1-8.1.1.1.2) and the system information messages contains elements as set forth in the table representing the message (see page 148-163).

It would therefore have been obvious to one of ordinary skill in the art to provide for the use of system information block or master information messages to

identify core networks available for call connections as taught by the Specification in order to standardize effectively ensure connection parameters availability.

18. Claims 276, 277, 289, 296, 311, 321, 349 and 350 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korpela and Lupien et al as applied to claims 265, 279, 290, 301, 312 and 338 above, and further in view of **3GPP TS 25.331 V3.0.0 (1999-10)**, hereinafter referred to as (the Specification).

Regarding claims 276, 277, 289, 296, 311, 321, 349 and 350, Korpela as modified by Lupien meets all limitations as applied above to claims 265, 279, 290, 301, 312 and 338 but the combination fail to explicitly disclose wherein the message is represented by a table as set forth in the claims.

The Specification teaches the use of broadcast of system information to broadcast system information elements that are of the same nature in a system information block (see page 24, paragraphs 8.1.1.1-8.1.1.1.2) and the system information messages contains elements as set forth in the table representing the message (see page 148-163).

It would therefore have been obvious to one of ordinary skill in the art to provide for the use of system information block or master information messages to identify core networks available for call connections as taught by the Specification in order to standardize and effectively ensure connection parameters being available for desired communications.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Huusko et al. (6,397,065) discloses a radio access network connected to one or more core networks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles N. Appiah whose telephone number is 571 272-7904. The examiner can normally be reached on M-F 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on 571-272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CA

CHARLES APPIAH
PRIMARY EXAMINER